INTELLIGENT COLOR TO TEXTURE CONVERTER

ABSTRACT

A method for preserving color information in a black and white version of a color image includes the analysis of the color image. The analysis comprises a search for

5   conflicting colors. Conflicting colors are colors that are normally transformed to the same gray level in a black and white version of the image. One embodiment, working in a CIELAB color space includes the use of a three dimensional histogram for detecting predominant colors having the same luminance. Such colors are classified as conflicting colors. Modulations are added to the gray scale versions of conflicting colors in order to

10   make them distinguishable. Modulation is only applied to conflicting colors thereby minimizing any deleterious effect and allowing the method to be applied in a "walk up mode" of an image processor. An image processor operative to perform the method includes an image analyzer operative to find and classify conflicting colors in the color image, and a gray scale modulator operative to add modulations to gray scale versions of

15   only the conflicting colors within a gray scale version of the color image.

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